



MD-11



DC-10/MD-10



A-300



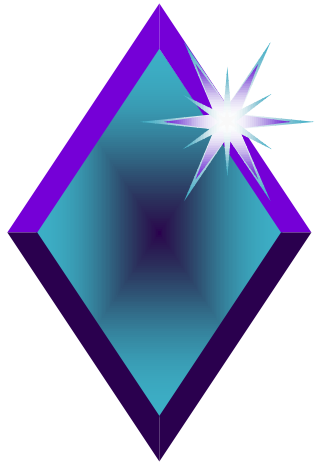
A-310



B-727

The “TITAN” Project

“Totally Integrated Technical Aircraft Network”



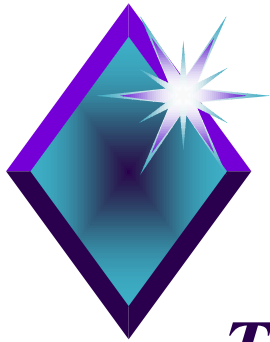
Revised

05/03/2001

Bob Bouchard

For questions related to TITAN:
Contact Bob Bouchard, rkbouchard@fedex.com, (901)224-4666
3131 Democrat Road, Memphis, TN, 38118

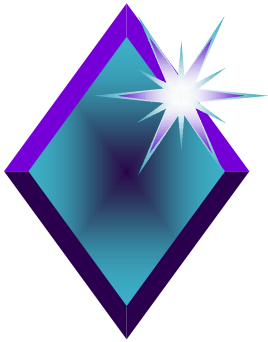




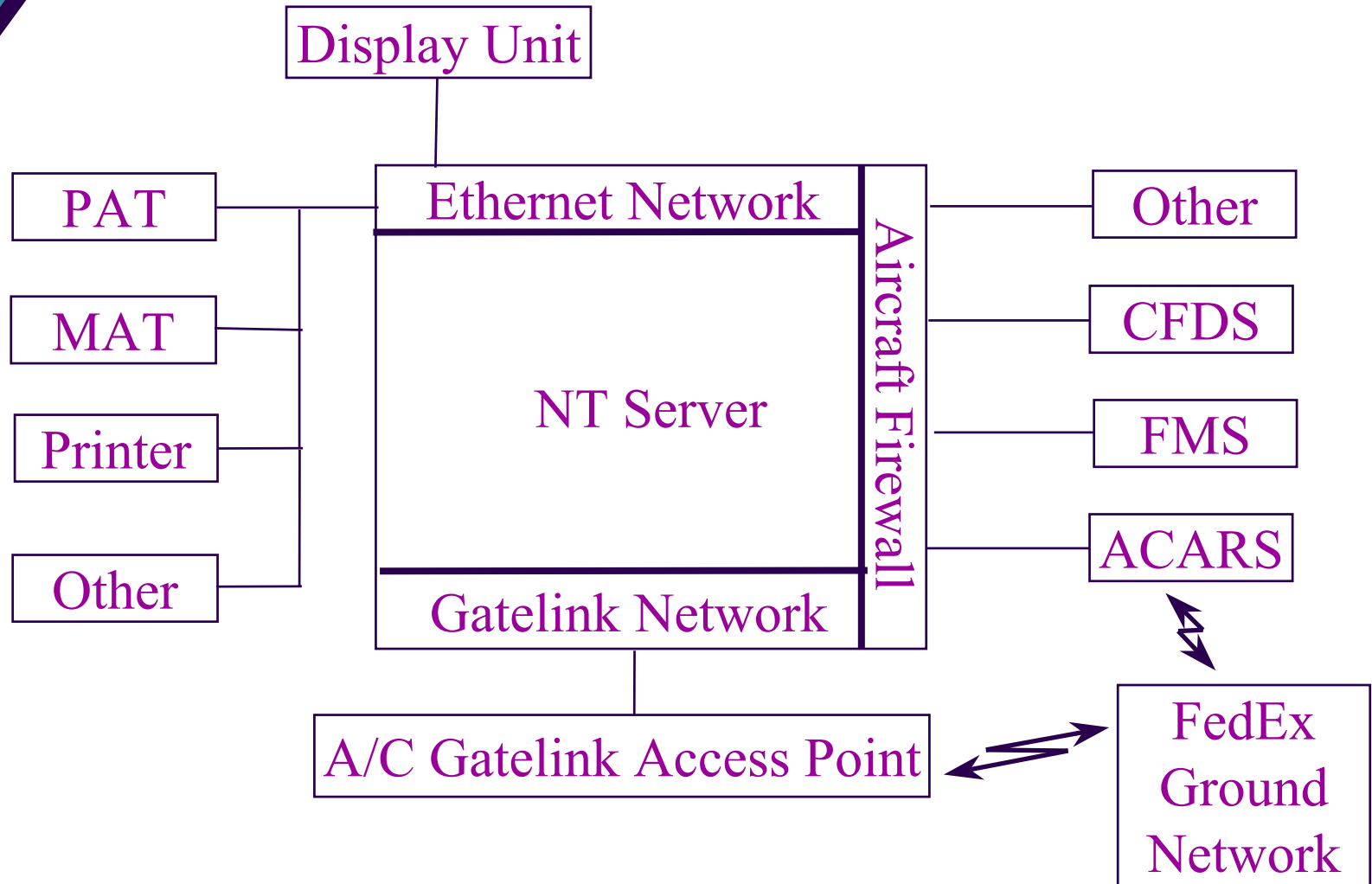
The “TITAN” Project

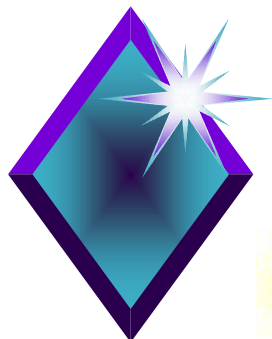
The Titan Project is a cooperative effort between Federal Express and Spirent. The intent of this project is to identify, design, develop and prove the viability of technology based solutions to reduce operating costs and enhance operational efficiency.

Increased utilization of the Airborne Server and Ground Stations, currently supporting the OMT, Gatelink and PAT programs, will be the near term focus of the project!

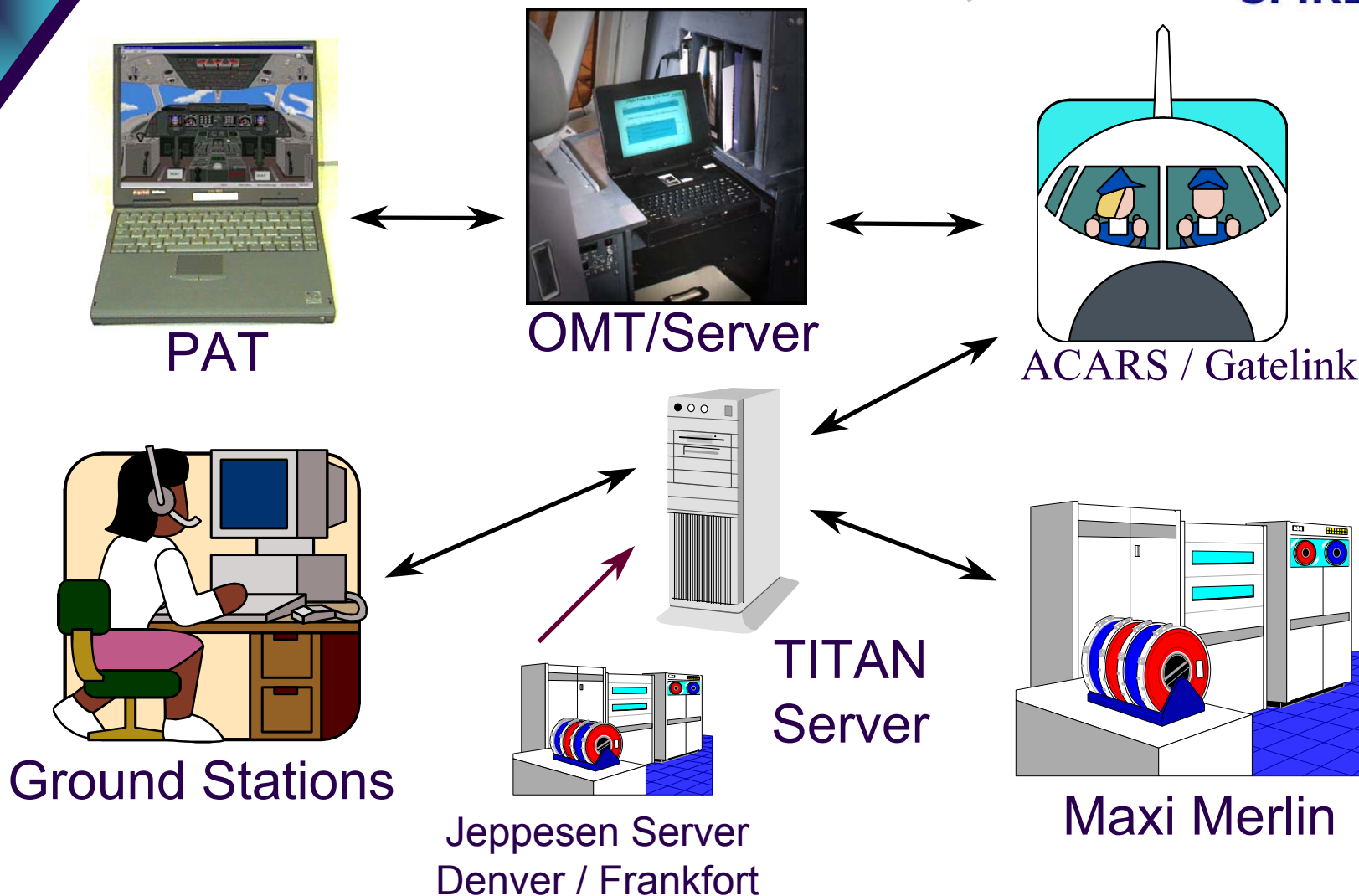


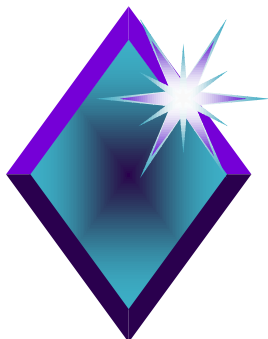
The “TITAN” Project



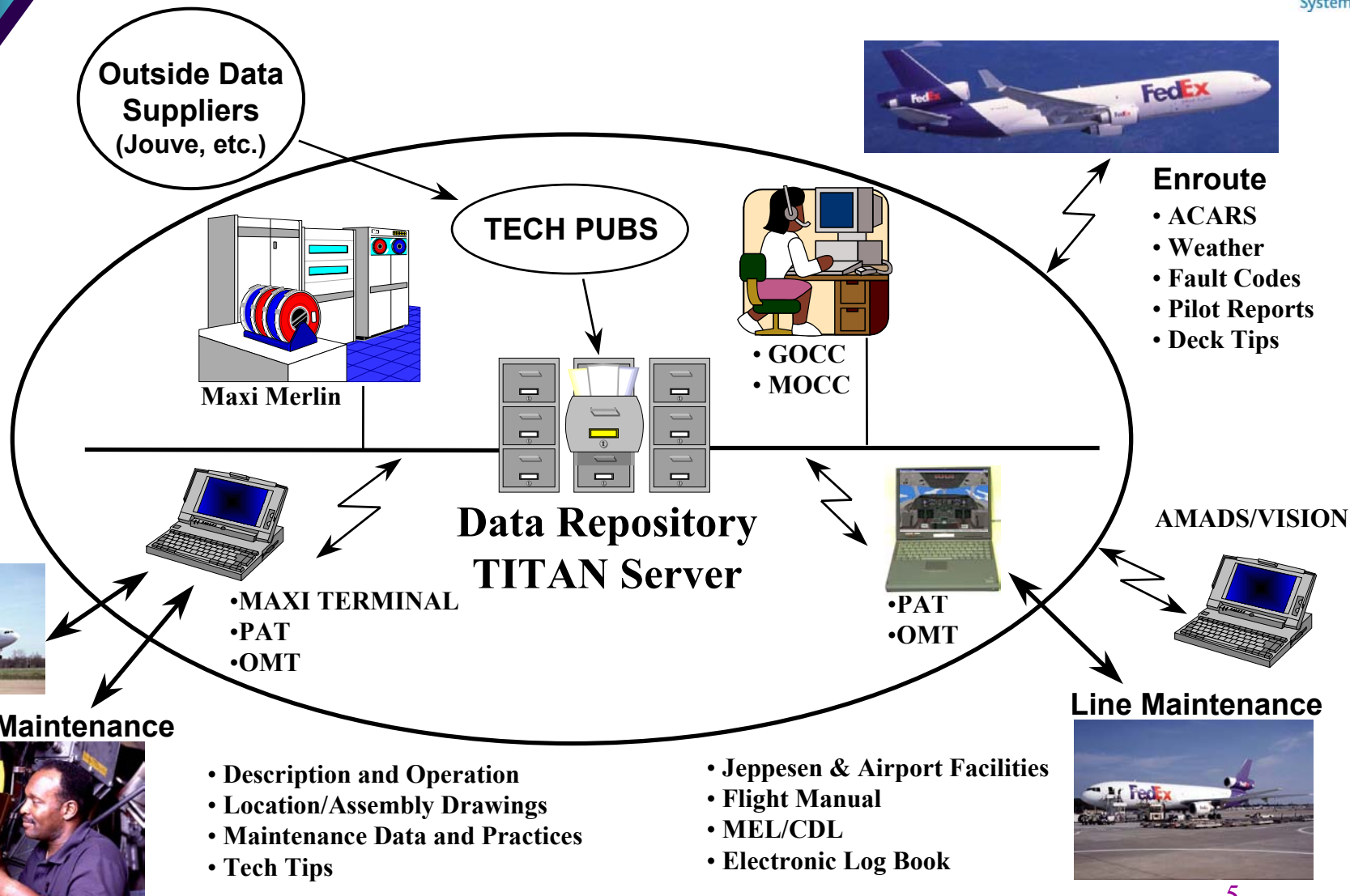


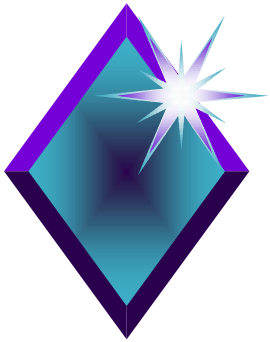
The “TITAN” Project





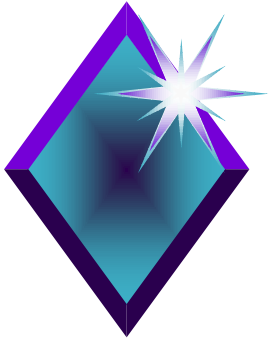
The "TITAN" Project





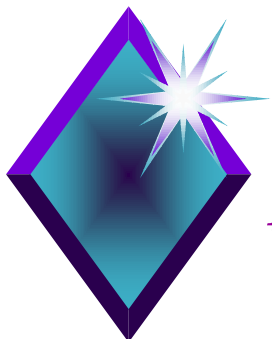
Relationship to other Projects

- Uses full format wide carriage ACARS Printer
- Supports electronic manuals onboard A/C
- Hosts the APLC software, with redundancy
- Ground Gatelink Access Point project
- Strongly supports the Early Alert Program (EAP)
- Will support electronic logbook philosophy
- Accurate crew write-ups, which supports reliability Goals
- Automated entry into Maxi Merlin
- Can be incorporated into VISION, AMADS, and OMNI
- Collect Flight Data Recorder data (FOQA program)



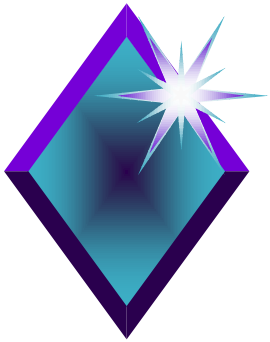
Reasons for TITAN

- ◆ Replacement of current APLC (performance Laptop)
- ◆ Electronic Fault Reporting System
- ◆ Access to Server hard drive space (electronic documents/file server)
- ◆ Electronic Logbook (virtual paperless cockpit)
- ◆ Communications enhancement
- ◆ Platform for Electronic Jeppesen

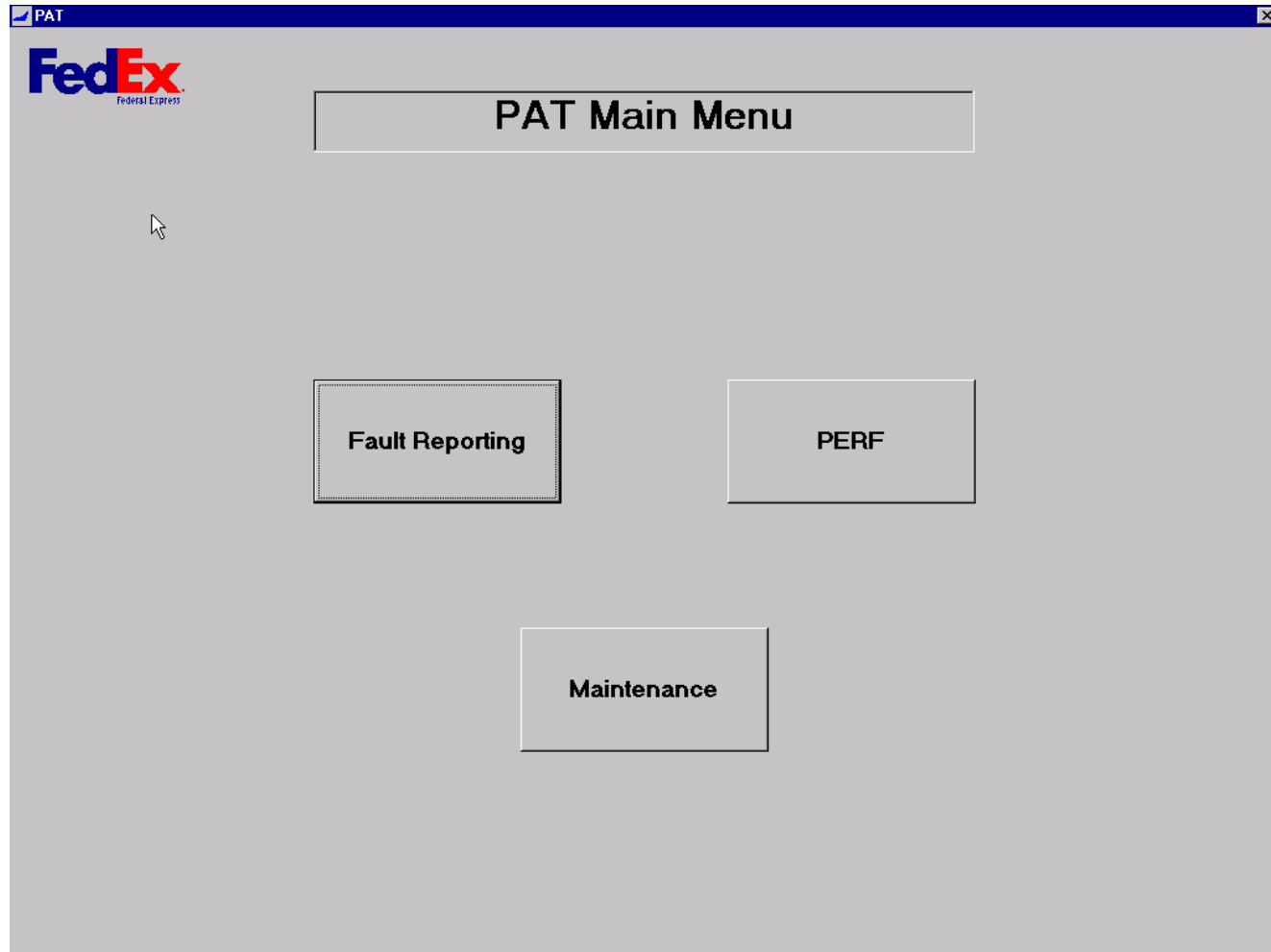


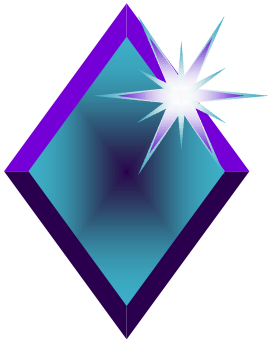
How The PAT Works



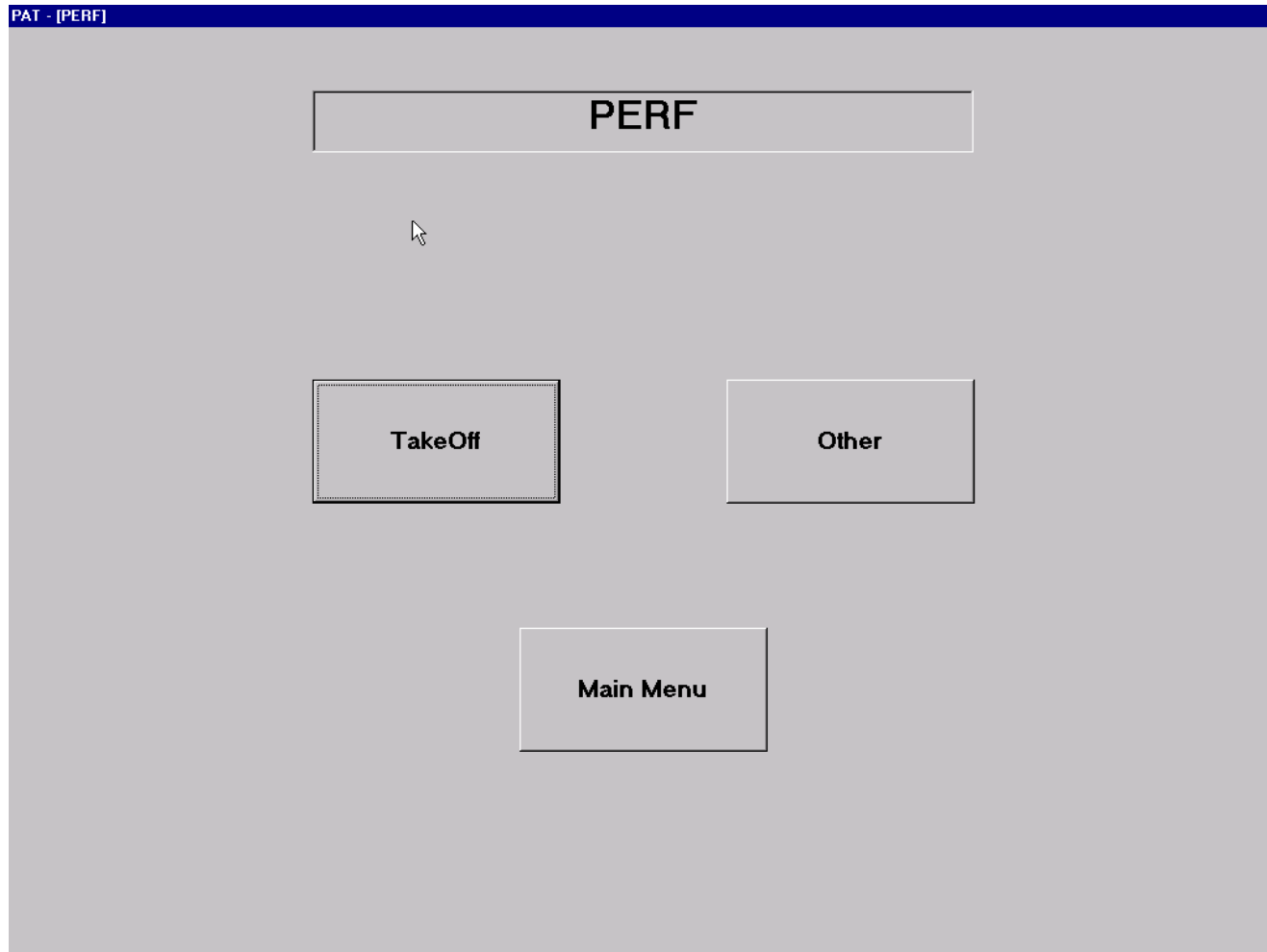


Current PAT Main Menu





PAT PERF Select Screen



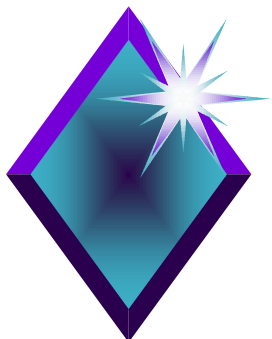


Takeoff Input Screen

Enter Flight Info

From City:	To City:
KMEM	PANC
Flight Number:	Aircraft Tail Number:
0004	N615FE

OK Cancel



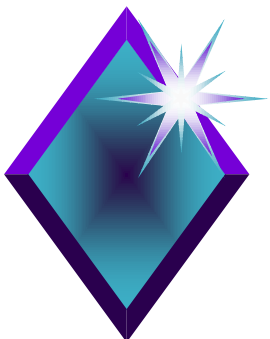
PAT Fault Reporting Main Screen



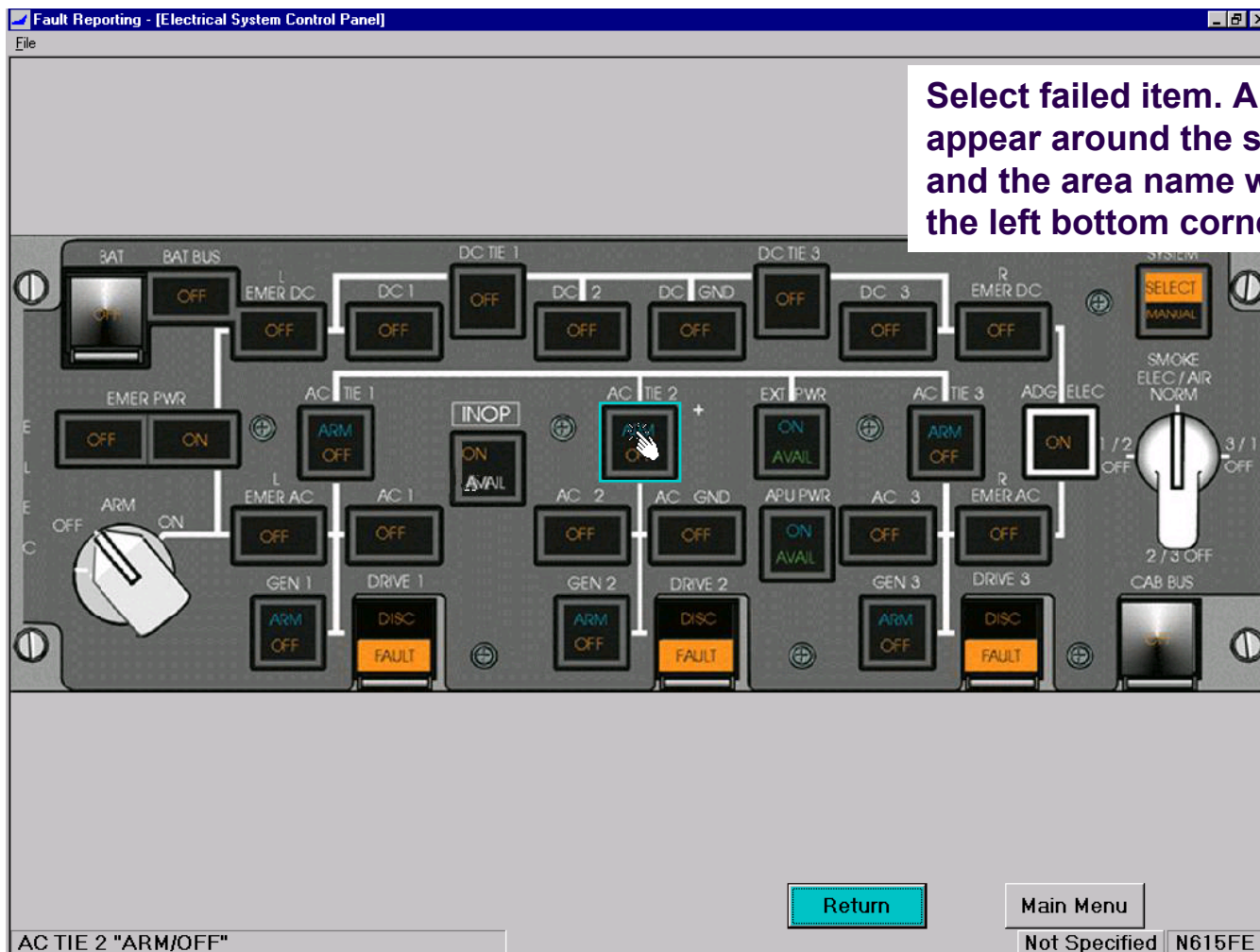
How PAT Fault Reporting works!



From Cockpit Screen
Select Area where problem
is. (A box will appear around
the selected area and the
area name will appear in the
left bottom corner)

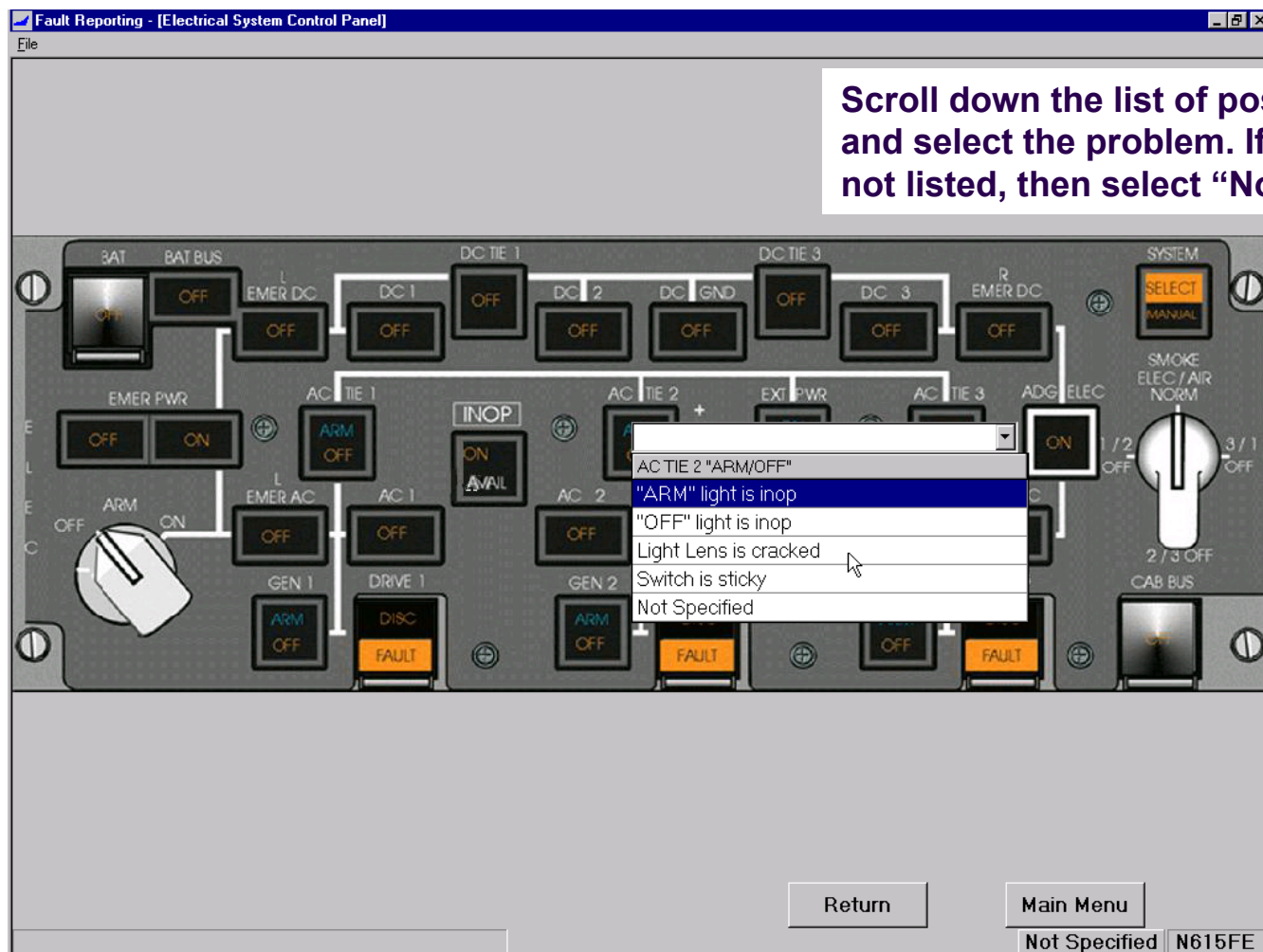


Electrical System Control Panel



Select failed item. A box will appear around the selected area and the area name will appear in the left bottom corner.

Electrical System Control Panel





Discrepancy Input Screen

Discrepancy Input

☐ Information Only

Item/Panel:
Electrical System Control Panel

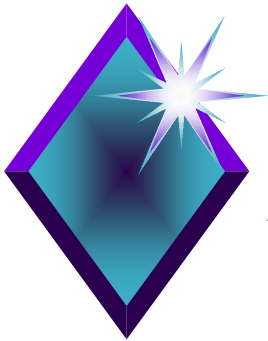
Sub Item:
AC TIE 2 "ARM/OFF"

Failure/Alert Message:
Light Lens is cracked

Flight Phase:
☐ Before Takeoff ☐ Climb ☒ Cruise ☐ Descent ☐ After Landing

Free Text Description (200 character maximum):
Lens is cracked on top right corner

Save As Draft Cancel AML



PDIS or MDIS Input Screen

Fault Reporting - [Electrical System Control Panel]

File

Discrepancy Input

☐ Information Only

Item/Panel:
Electrical System Control Panel

Sub Item:
AC TIE 2 "ARM/OFF"

Failure/Alert Message:
Light Lens is cracked

Flight Phase:
☐ Before Takeoff ☐ Climb ☐ After Landing

Free Text Description (200 characters)
Lens is cracked on top right corner

Save As Draft Cancel AML

Return Main Menu

AC TIE 2 "ARM/OFF" Not Specified N615FE

AML Input ID Number

PDIS 1234

MDIS

OK Cancel



EAML Screen

Aircraft Maintenance Log

Aircraft Tail Number N615FE		AIRCRAFT MAINTENANCE LOG		Page Number	
PDIS 1234		DISCREPANCY		MDIS	
Item: Electrical System Control Panel					
Subitem: AC TIE 2 "ARM/OFF"					
Description: Light Lens is cracked					
Lens is cracked on top right corner					
ATA/WRI No. 24-20					
MAINTENANCE ACTION					
Tagged Parts Changed or Swapped (Y/N) <input type="checkbox"/>		MEL/CDL REFERENCE <input type="checkbox"/>	<input type="checkbox"/> CLOSED	<input type="checkbox"/> OPEN ITEMS LIST	<input type="checkbox"/> CAT Status Changed <input type="checkbox"/> No
Mechanic's Signature		Zin Date MM/DD/YY	<input type="checkbox"/> Yes <input type="checkbox"/> RII <input type="checkbox"/> No	Inspector's Signature	
Employee Number / Certificate Number / Vendor Number		Station XXX	Maj. Repairs <input type="checkbox"/> Yes Maj. Alterations <input type="checkbox"/> Yes	Employee Number / Certificate Number / Vendor Number	
Employee Number / Certificate Number / Vendor Number		Station XXX	Zin Date MM/DD/YY	OIL ADDED (US QTS)	#1 #2 #3 #4 APU

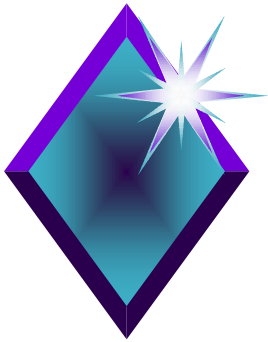
FedEx M-1807 9/98 LOGOS# 139000

Exception Distribution: White - Stay in Act, Canary - Station Copy

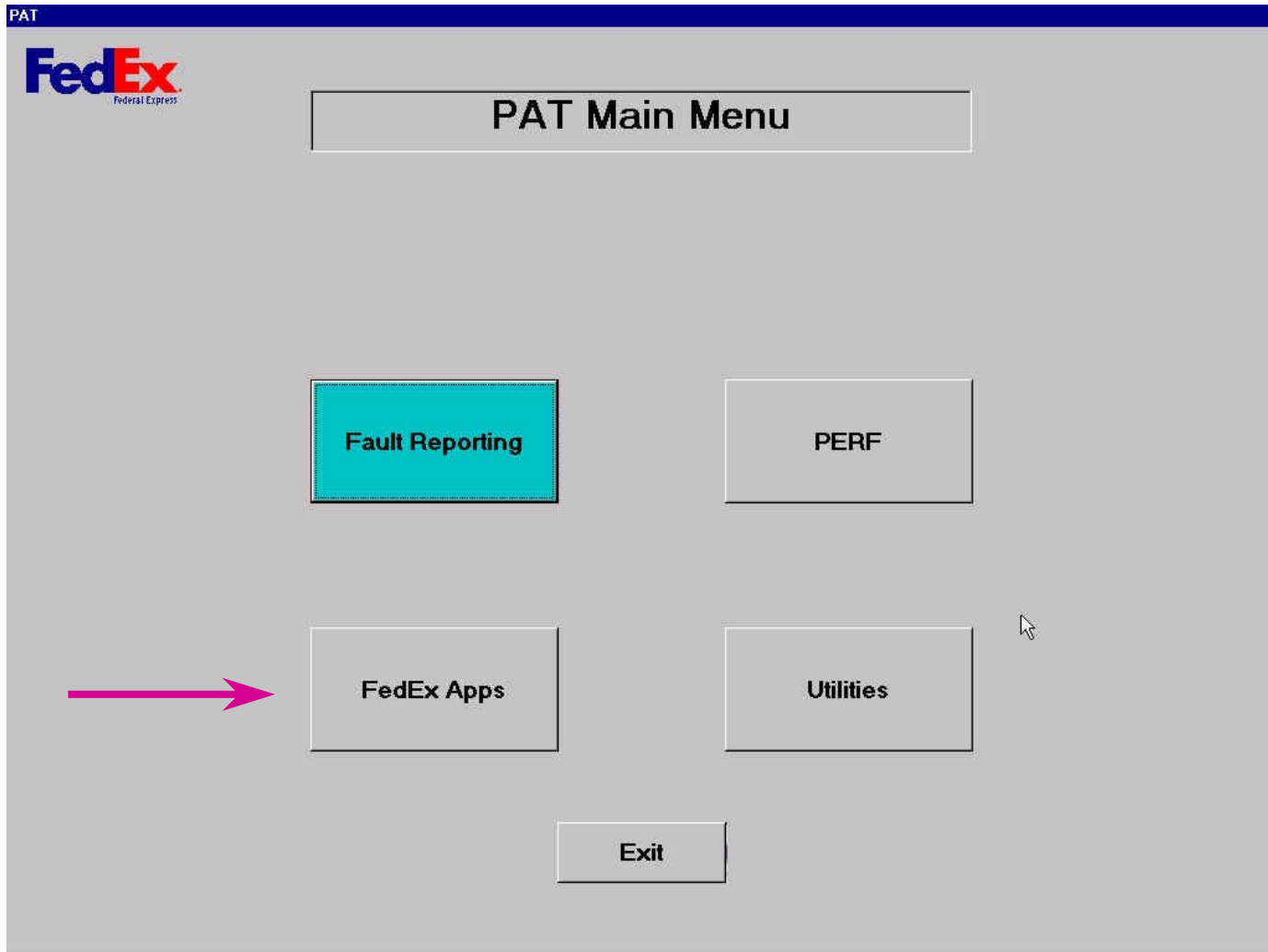
Return

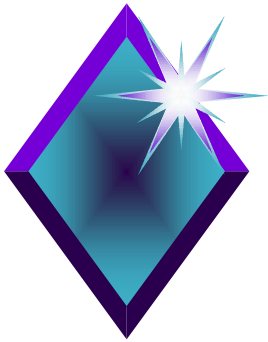
Print

Send

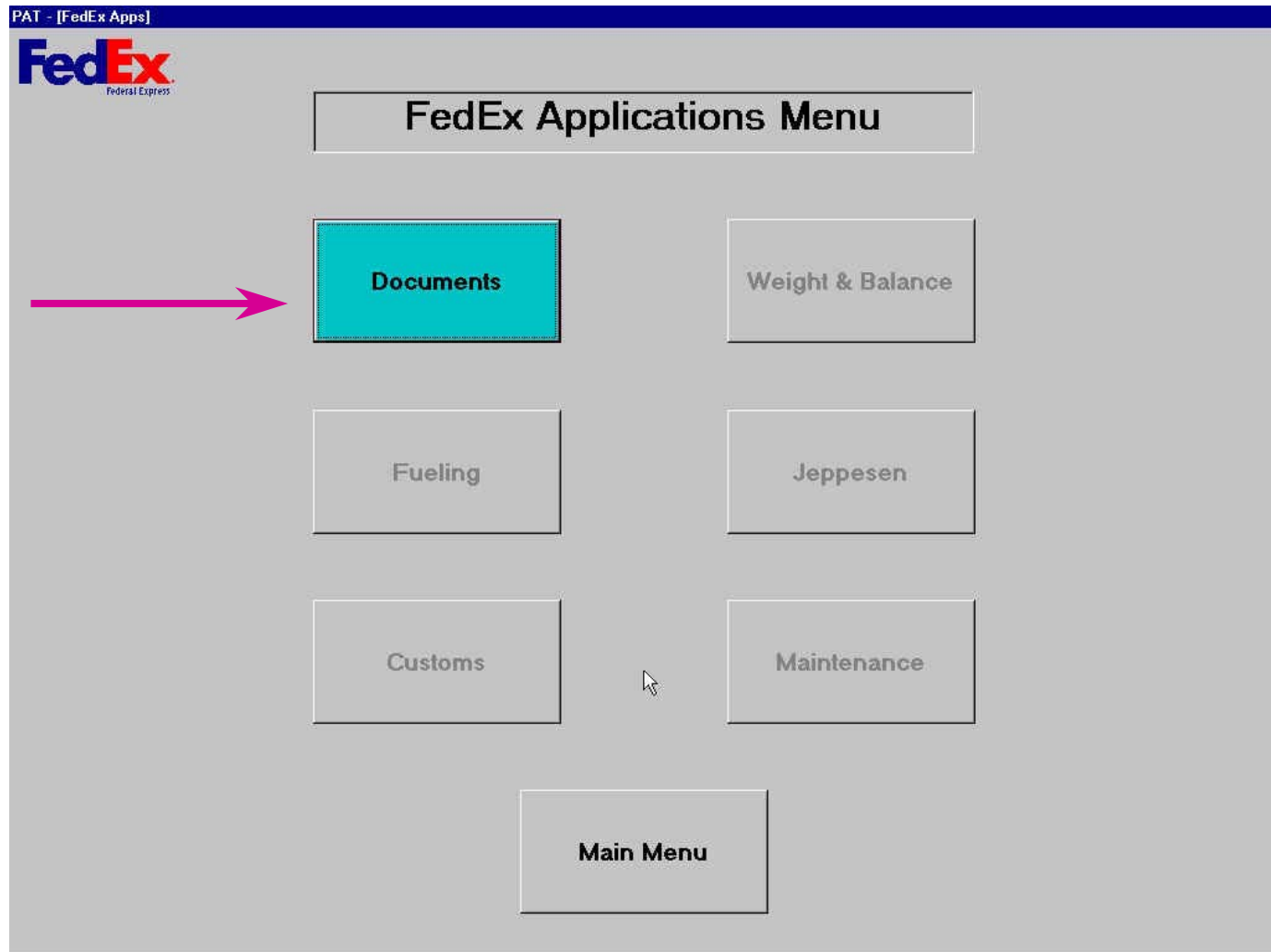


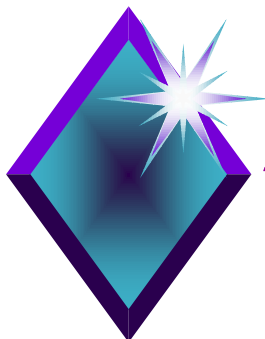
New PAT Main Menu



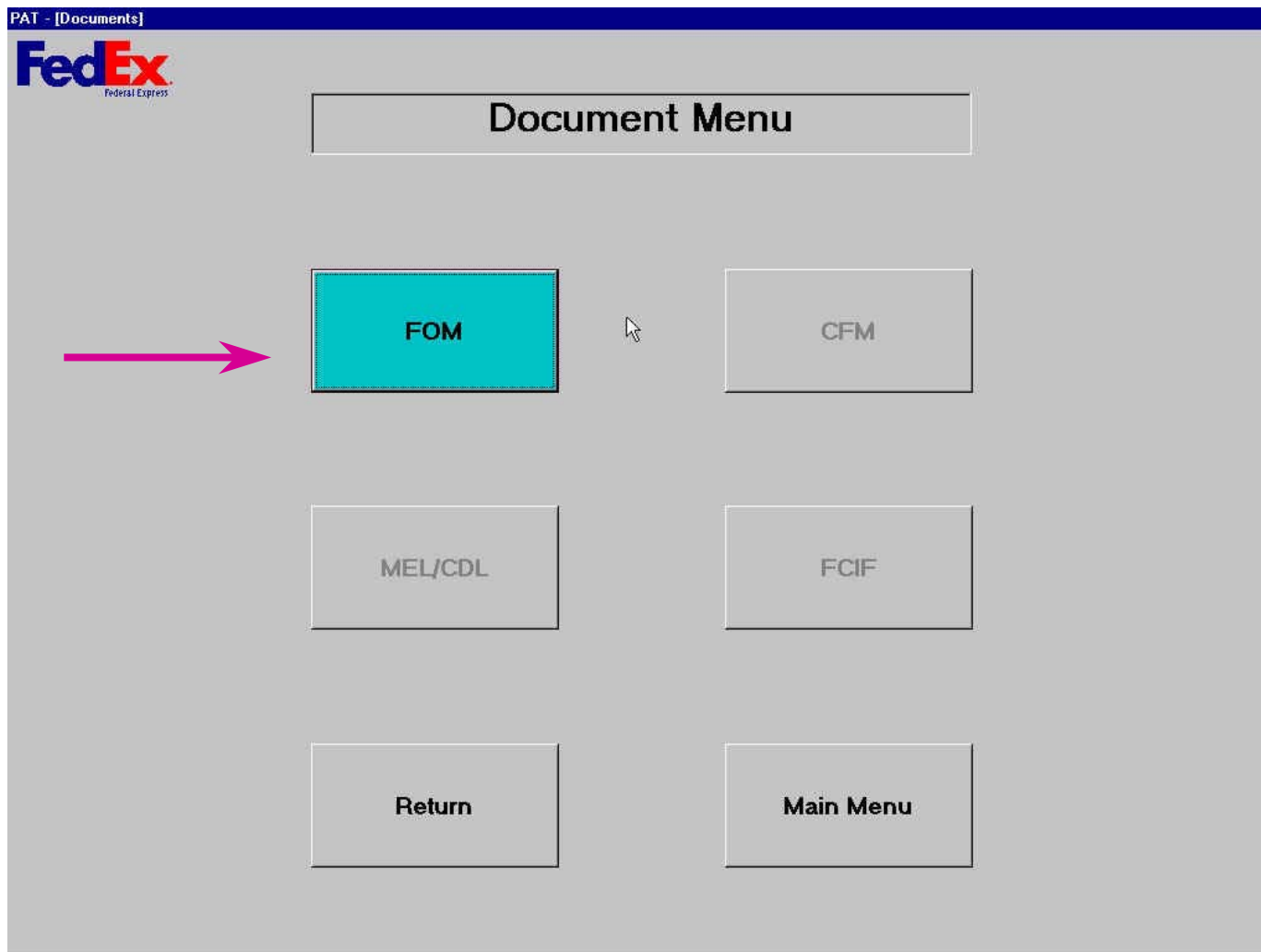


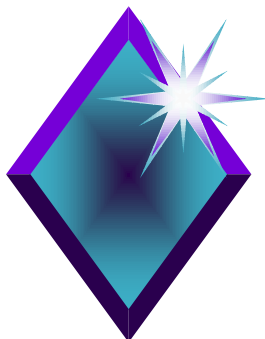
Additional PAT Applications



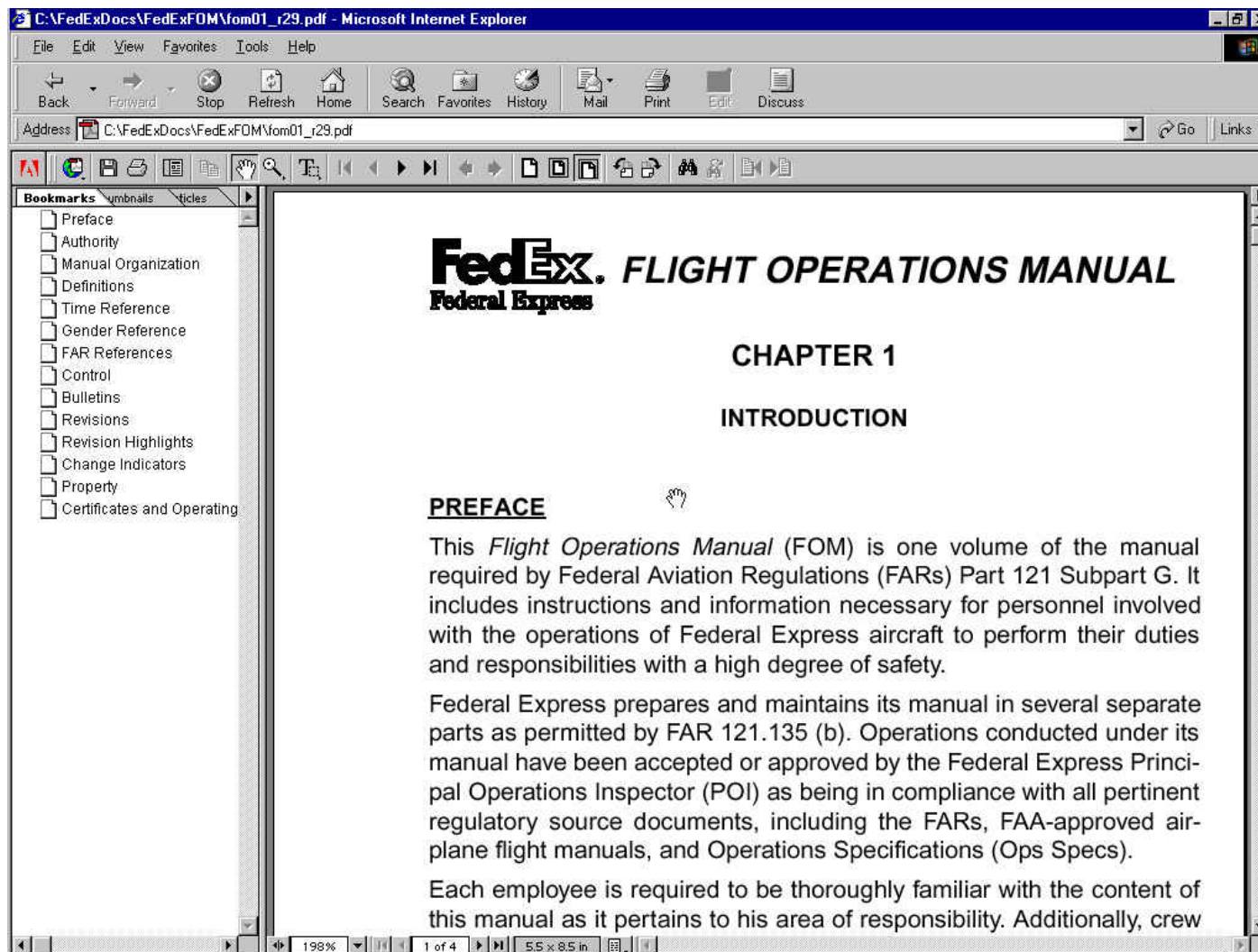


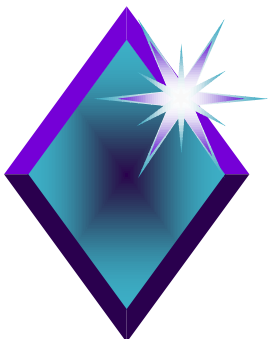
Flight Operations Manual



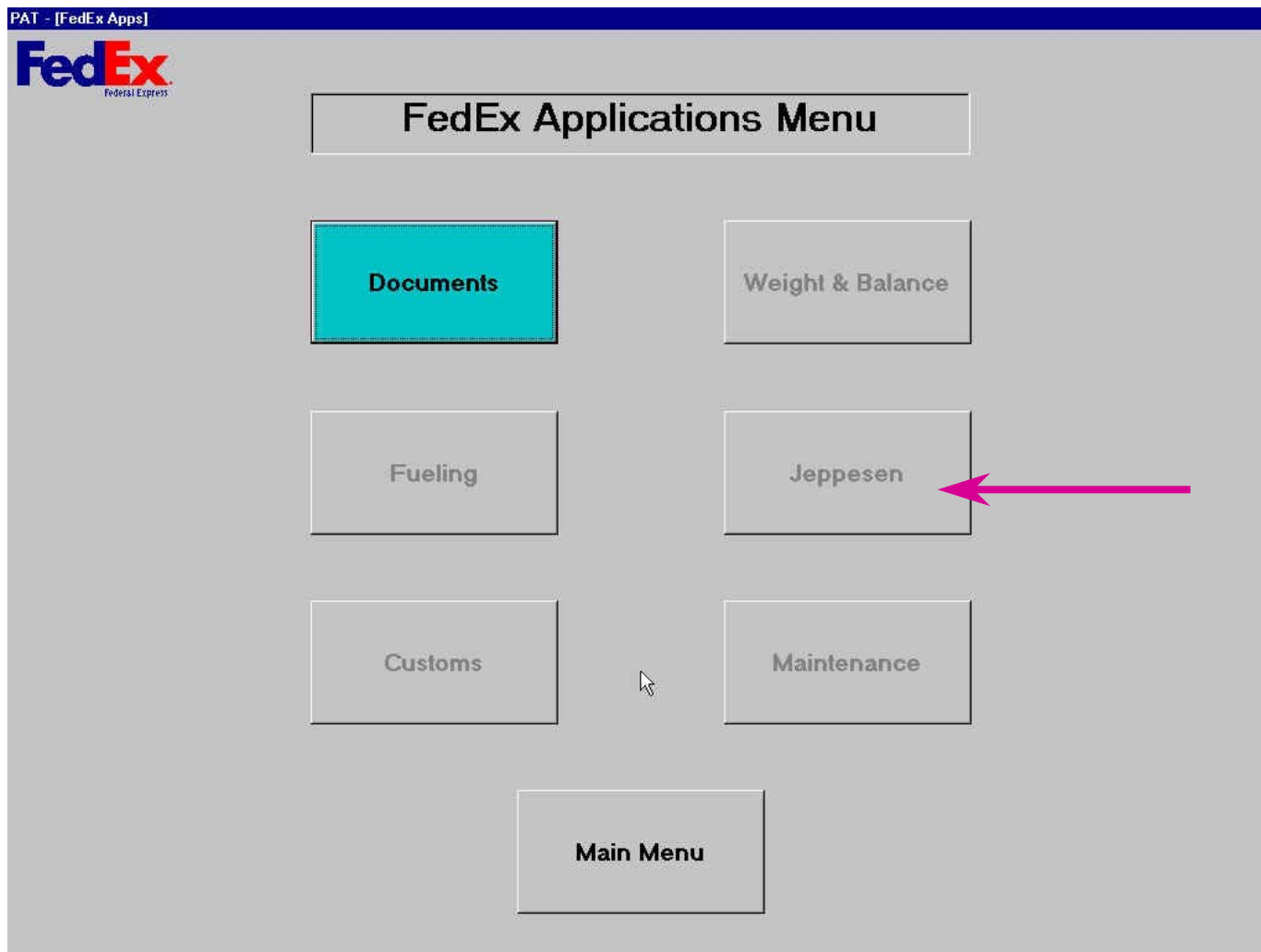


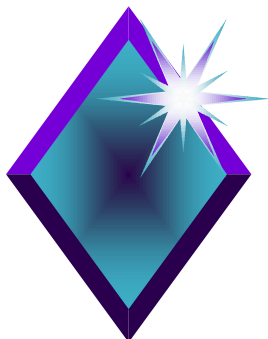
Flight Operations Manual





Jeppesen “JEPPVIEW” Screens





Jeppesen “JEPPVIEW” Screens

JeppView 2.5 / Airports

3973 airports shown out of 3973

00R Airport Info Chart NOTAMs Set Airport Preferences Store/Get Route

Complete List Only State: AB Only Favorite Airports

Dist from Dest

ICAO	IATA	Airport Name	City Name	State
00R		LIVINGSTON MUN	LIVINGSTON	TX
02A		GRAGG-WADE	CLANTON	AL
02G		COLUMBIANA CO	EAST LIVERPOOL	OH
04G		LANSLOWNE	YOUNGSTOWN	OH
04Y		HAWLEY MUN	HAWLEY	MN
05C		GRIFFITH-MERRILLVILLE	GRIFFITH	IN
06A		MOTON MUN	TUSKEGEE	AL
06D		ROLLA MUN	ROLLA	ND
06N		RANDALL	MIDDLETOWN	NY
07C		DE KALB CO	AUBURN	IN
07F		GLADEWATER MUN	GLADEWATER	TX
07G		BEACH	CHARLOTTE	MI
08A		WETUMPKA MUN	WETUMPKA	AL
08K		HARVARD STATE	HARVARD	NE
09A		BUTLER-CHOCTAW CO	BUTLER	AL
09J		JEKYLL ISLAND	JEKYLL ISLAND	GA
0A3		SMITHVILLE MUN	SMITHVILLE	TN
0B4		HARTINGTON MUN	HARTINGTON	NE
0B5		TURNERS FALLS	MONTAGUE	MA
0B8		FID ELIZABETH	FISHERS ISLAND	NY

Define

Departure

Define

Destination

Define

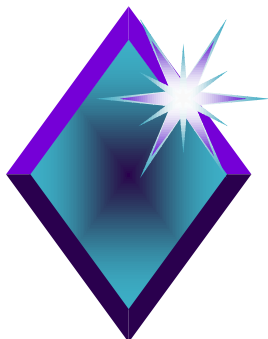
Alternate

Delete Alternate

KMEM

Clear Entry Search

Show 00R Charts



Jeppesen “JEPPVIEW” Screens

JeppView 2.5 / Chart List

29 charts listed out of the 29 available charts

Charts for MEMPHIS INTL (KMEM)

KMEM Airport Info KMEM Chart NOTAMs

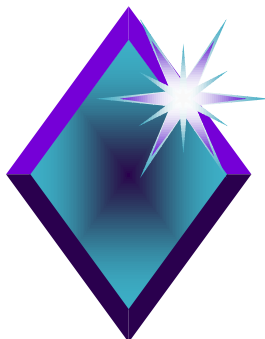
ALL NONE

☒ Approach ☒ Departure ☒ Noise
☒ Airport ☒ Arrival ☒ Airspace

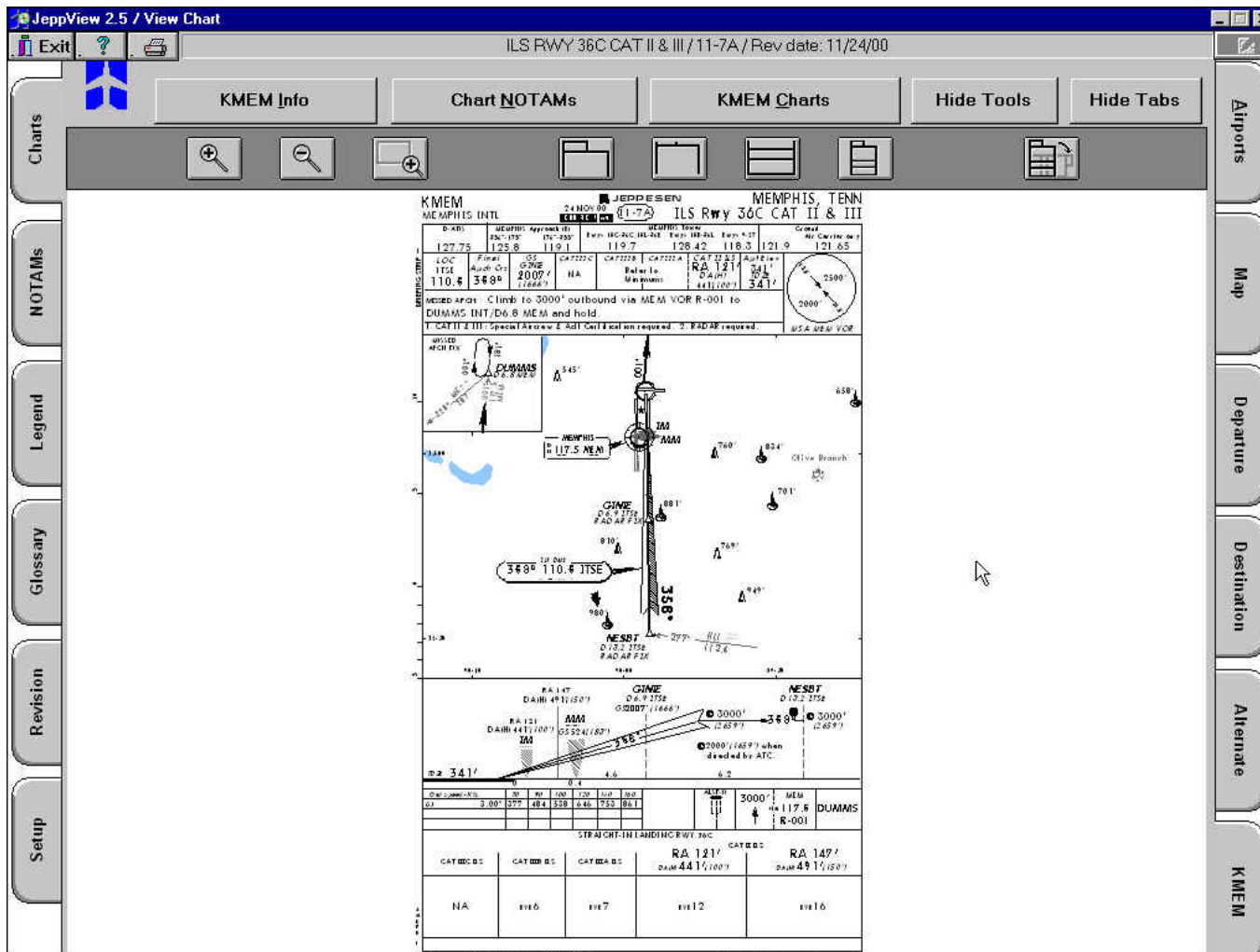
Procedure/Index	Rev Date	Action	Eff Date
ILS RWY 18R 11-4	12/8/00	REV	
ILS RWY 27 11-5	12/8/00	REV	
ILS RWY 36L 11-6	9/29/00		
ILS RWY 36L CAT II&III 11-6A	9/29/00		
ILS RWY 36C 11-7	11/24/00		
ILS RWY 36C CAT II & III 11-7A	11/24/00		
ILS RWY 36R 11-8	9/29/00		
ILS RWY 36R CAT II & III 11-8A	9/29/00		
VOR DME RWY 18R 13-1	9/1/00		
NDB OR GPS RWY 9 16-1	9/1/00		

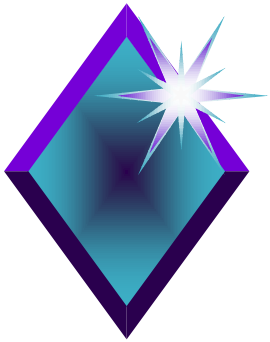
Show Current Chart Show Future Chart Cancel

Charts NOTAMs Legend Glossary Revision Setup Airports Map Departure Destination Alternate KMEM



Jeppesen “JEPPVIEW” Screens





Results!!

- ◆ Message will get sent to the ground via ACARS.
- ◆ MOCC and down line station get the message and will know exactly what the pilot will be writing up.
- ◆ Mocc and mechanics will check OMT for faults related to Pilot report and prepare for troubleshooting.
- ◆ Bottom Line : **NO SURPRIZES!!!!!!!!!!**
- ◆ *Viewing and printing of Jeppesen Charts.*
- ◆ *Platform for several other applications!*